

Remarks

Claims 1-8 are pending in the present application. Claims 1-8 have been amended. No new matter has been added. Reconsideration of the present application is requested.

As an initial matter, Applicants gratefully acknowledge the Examiner's indication that 3-5 are allowable. Claim 3 has been amended to be rewritten in independent form, and to clarify the subject matter recited therein. Claims 4 and 5 depend from claim 3. Claims 3-5 should now be allowed.

Claims 1, 2, 6, 7 and 8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,532,506 to Dunstan et al. (the "Dunstan patent"). It is respectfully submitted that the Dunstan patent does not anticipate any of claims 1, 2, 6, 7 and 8, for at least the following reasons.

The Dunstan patent generally relates to an adaptation of bus speed, if two devices having different working speeds are to communicate with another on the same bus. In the Dunstan patent, the bus speeds are automatically adapted as described in, for example, col. 8, lines 19-24. To achieve this, the message originating device places a first bus negotiating logic pulse onto the bus, and in response, the receiving device places a second bus negotiating logic pulse onto the bus, whereby the pulse width is representative of the devices speed capability. The data bus carries messages from one device to another with the content of the messages conveyed as a series of data bits, whereby each data bit is allocated a particular window of time, in which to convey its logic state. That window of time is the bit time. The bus speed is directly related to this bit time, so that a short bit time provides a faster bus speed and a longer bit time reduces the bus speed. See, e.g., col. 9, lines 27-36. The Dunstan patent describes that this bit time could be variable for devices working on different bus speeds, which meant different bit times, to receive the upcoming message. See, e.g., col. 9, lines 39-44. The bus speed, that is established between at least two devices will be the slower one of the two proposed speeds, as indicated by their respective pulses, whereby adapting the slower speed ensures that both devices are capable of reading a message conveyed between them. See, e.g., col. 9, lines 56-61.

In contrast, in accordance with the present invention, there is only one bus speed. See, e.g., Fig., 5 showing constant bit time. According to the present invention, every device coupled to the bus uses this same bus speed. Thus, there is no difference in

bus speed (also no different in bit time) between the at least two users of the bus. There may be, however, differences between the clocks, which means a tolerance between the time bases of the at least two users. The bit time is the same, but the clocks are not synchronized yet. The at least two users of the present invention have a different view of the time; because each has its own clock, their time bases are not exactly identical. One object of the present invention is to synchronize the time bases, but not to change the bus speed or adapt the bus speed. Thus, a correction value is used to adapt the timer increment rate of the time bases of a user, whereby the bus speed is still constant and unchanged. In one embodiment, voltage controlled oscillators or quartz crystals are used as clocks or time bases of users, each of which gives the timer increment rate of the respective user. The different time bases of every users, however, are not giving the exact same increment rate or the exact same time, e.g., because of fabrication tolerances. To adjust this timing different between the time bases of the different bus users, the method according to the present invention may be used.

Claim 1, for example, recites the following:

A method for an exchange of data in messages between at least two users connected by a bus system and having separate time bases ***but operating a same bus speed***, the method comprising:

causing the at least two users to transmit data via the bus system in the messages, ***the at least two users operating at the same bus speed***;

* * *

causing the at least second one of the at least two users to adapt as a function of the correction value at least one of the second time information and the time base of the at least second one of the at least two users, ***whereby the at least two users continue to operate at the same bus speed***.

Claim 8 recites similar language. Claims 2, 6 and 7 depend from claim 1. As discussed above, the Dunstan patent describes devices operating at two different bus speeds, and adapting the faster one of the devices to operate at the slower one of the bus speeds. Thus, the Dunstan patent does not anticipate any of claims 1, 2 and 6-8.

In view of the foregoing, the rejection of claims 1, 2 and 6-8 should be withdrawn.

Each of the issues raised by the Examiner has been addressed. It is respectfully submitted that all pending claims 1-8 are in condition for allowance. Passage to issuance is requested.

Respectfully Submitted,

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